Nuclear Instruments and Methods in Physics Research A262 (1987) 553–562
North-Holland, Amsterdam

AUTHOR INDEX

Abe, I., see Takada, Y. . . . A262 (1987) 511
Åberg, T., Statistical aspects of ion–atom collisions . . . A262 (1987) 1
Åkesson, T., A.L.S. Angelis, F. Corriveau, R.C.E. Devenish, G. Di Tore, C.W. Fabjan, F. Lamarche, C. Leroy, M.L. McCubbin, N.A. McCubbin, L.H. Olsen, M. Seman, Y. Sirois, R. Wigmans and W.J. Willis, Performance of the uranium/plastic scintillator calorimeter for the HELIOS experiment at CERN . . . A262 (1987) 243
Akimov, Yu.K., Combined scintillation and track technique to search for $\beta\beta$-decay (*Letter to the Editor*) . . . A262 (1987) 539
Andersen, L.H., see Datz, S. . . . A262 (1987) 62
Angelis, A.L.S., see Åkesson, T. . . . A262 (1987) 243
Anholt, R., see Meyerhof, W.E. . . . A262 (1987) 10
Annand, J.R.M., G.I. Crawford and R.O. Owens, Large position sensitive plastic scintillation detectors . . . A262 (1987) 329
Annand, J.R.M., see MacGregor, I.J.D. . . . A262 (1987) 347
Annand, J.R.M., A fast module for pulse shape analysis . . . A262 (1987) 371
Aoki, A., see Ogawa, H. . . . A262 (1987) 23
Arai, H., K. Ishii, K. Sera, H. Orihara and S. Morita, Ion-induced M X-ray emission from heavy lanthanides . . A262 (1987) 144
Arignon, M., J. Bystricky, J. Derégel, F. Lehar, A. De Lesquen, F. Petit, L. Van Rossum, J.M. Fontaine, F. Perrot, J. Ball and C.D. Lac, Apparatus for the measurement of spin dependent observables in pp elastic scattering . . . A262 (1987) 207
Arignon, M., see Fréjus Collaboration . . . A262 (1987) 463
Arnaud, M., see Fréjus Collaboration . . . A262 (1987) 463
Arnold, J.R., see Englert, P. . . . A262 (1987) 496
Arpesella, C., see Fréjus Collaboration . . . A262 (1987) 463
Awaya, Y., see Kanai, Y. . . . A262 (1987) 128
Awaya, Y., see Mizogawa, T. . . . A262 (1987) 141

Bachau, H., see Rozet, J.P. . . . A262 (1987) 84
Ball, J., see Arignon, M. . . . A262 (1987) 207
Baracat, A., see Fréjus Collaboration . . . A262 (1987) 463
Baran, R., K. Fiedler, A. Hofmann, R. Olszewski, H.W. Ortner and C. Patzelt, A 64-element scintillator hodoscope for the determination of the pion momentum of the πM1 beam at SIN (*Letter to the Editor*) . . . A262 (1987) 541
Barat, M., see Rozet, J.P. . . . A262 (1987) 84
Bareyre, P., see Fréjus Collaboration . . . A262 (1987) 463
Barloutaud, R., see Fréjus Collaboration . . . A262 (1987) 463
Beck, R., see Novotny, R. . . . A262 (1987) 340
Becker, K.H., see Fréjus Collaboration . . . A262 (1987) 463
Behr, L., see Fréjus Collaboration . . . A262 (1987) 463
Ben-Zvi, I., see Lu, J.-Q. . . . A262 (1987) 200
Benadjal, Y., see Fréjus Collaboration . . . A262 (1987) 463
Benait, R., see Fréjus Collaboration . . . A262 (1987) 463
Berger, Ch., see Fréjus Collaboration . . . A262 (1987) 463
Bernardi, E., G. Drews, M.A. Garcia, R. Klanner, U. Kötz, G. Levman, M. Lomperski, D. Lüke, E. Ros, F. Selonke, H. Tiecke, M. Tsirou and W. Vogel, Performance of a compensating lead–scintillator hadronic calorimeter . . . A262 (1987) 229
Bernaudin, Ph., see Fréjus Collaboration . . . A262 (1987) 463
Biino, C., R. Cester, E. Menichetti, S. Palestini, L. Pesando and A. Piccotti, Response of scintillating and Cherenkov radiating glasses to gamma rays of energy below 100 MeV . . . A262 (1987) 408
Bittcher, M., see Gruëbler, W. . . . A262 (1987) 307
Bjurman, B., B. Erlandsson and S. Mattsson, Efficiency calibration of Ge spectrometers for measurements on environmental samples (*Letter to the Editor*) . . . A262 (1987) 548
Bland, R.W., see Fréjus Collaboration . . . A262 (1987) 463
Blok, H., E.A.J.M. Offermann, C.W. De Jager and H. De Vries, Path reconstruction and resolution improvement in magnetic spectrometers . . . A262 (1987) 291
Blum, D., see Fréjus Collaboration . . . A262 (1987) 463
Blumenfeld, L., see Rozet, J.P. . . . A262 (1987) 84

0168-9002/87/$03.50 © Elsevier Science Publishers B.V.
(North-Holland Physics Publishing Division)

Bolme, G.O., see Fortgang, C.M. A262 (1987) 197
Borg, A., see Fréjus Collaboration A262 (1987) 463
Born, R., D. Hohlwein, J.R. Schneider and K. Kakurai, Characterization of a sapphire single crystal for the use as filter in thermal neutron scattering A262 (1987) 359
Bourdarious, C., see Fréjus Collaboration A262 (1987) 463
Bousser, F., see Fréjus Collaboration A262 (1987) 463
Branford, D., see MacGregor, I.J.D. A262 (1987) 347
Brom, J.M., see Mouëllic, B. A262 (1987) 269
Brugnon, J., see Fréjus Collaboration A262 (1987) 463
Bystricky, J., see Arignon, M. A262 (1987) 207

Cao Zhong, Empirical relation between efficiency and volume of HPGe detectors A262 (1987) 439
Cederquist, H., see Levin, J.C. A262 (1987) 106
Cester, R., see Biino, C. A262 (1987) 408
Chang, J.H., see Ohura, M. A262 (1987) 137
Chardin, G., see Fréjus Collaboration A262 (1987) 463
Chase Jr, C.W., see Googins, J. A262 (1987) 544
Chemarin, M., see Mouëllic, B. A262 (1987) 269
Chetioui, A., see Rozet, J.P. A262 (1987) 84
Chrisholm, A., see Gruëbler, W. A262 (1987) 307
Church, D.A., see Levin, J.C. A262 (1987) 106
Cocke, C.L., E.Y. Kamber, L.N. Tunnell, S.L. Varghese and W. Waggoner, Angular distributions of reaction products from low energy capture by multicharged ions A262 (1987) 89
Corazzi, M., see Fréjus Collaboration A262 (1987) 463
Corriveau, F., see Åkesson, T. A262 (1987) 243
Coulareau, E., see Fréjus Collaboration A262 (1987) 463
Cramer, J.G., see Lu, J.-Q. A262 (1987) 200
Crawford, G.I., see Annand, J.R.M. A262 (1987) 329

Dalton, A.W., Effect of long term target changes on the neutron yield from a low intensity (d, t) neutron generator A262 (1987) 451
Dancer, S.N., see MacGregor, I.J.D. A262 (1987) 347
D'Angelo, A. and C. Schaerf, How to improve the useful intensity of tagged beams (*Letter to the Editor*) A262 (1987) 537
Datz, S., see Schuch, R. A262 (1987) 6
Datz, S., R. Hippler, L.H. Andersen, P.F. Dittner, H. Knudsen, H.F. Krause, P.D. Miller, P.L. Pepmiller, T.M. Rosseel, N. Stolterfoht, Y. Yamazaki and C.R. Vane, Electron transfer processes in collisions of highly charged energetic (0.1–1.0 MeV/nucleon) ions with helium atoms A262 (1987) 62
Daum, H.J., see Fréjus Collaboration A262 (1987) 463
De Jager, C.W., see Blok, H. A262 (1987) 291
De Jager, C.W., see Offermann, E.A.J.M. A262 (1987) 298
De Jongh, A.P., see Vlieg, E. A262 (1987) 522
De Lesquen, A., see Arignon, M. A262 (1987) 207
De Vries, H., see Blok, H. A262 (1987) 291
De Vries, H., see Offermann, E.A.J.M. A262 (1987) 298
De Vries, J. and F.E.T. Kelling, Fast timing with photomultiplier dynode pulses A262 (1987) 385
Debraine, A., see Fréjus Collaboration A262 (1987) 463
Degrange, B., see Fréjus Collaboration A262 (1987) 463
Denski, S., see Fréjus Collaboration A262 (1987) 463
Derégel, J., see Arignon, M. A262 (1987) 207
Deuzet, G., see Fréjus Collaboration A262 (1987) 463
Devenish, R.C.E., see Åkesson, T. A262 (1987) 243
Di Ciaccio, L., see Fréjus Collaboration A262 (1987) 463
Di Tore, G., see Åkesson, T. A262 (1987) 243
Dietrich, J., A linear ion optics model for extraction from a plasma ion source A262 (1987) 163
Dittner, P.F., see Schuch, R. A262 (1987) 6
Dittner, P.F., see Datz, S. A262 (1987) 62
Drews, G., see Bernardi, E. A262 (1987) 229
Dubbs, T.P., see Norbeck, E. A262 (1987) 546
Dudelzak, B., see Fréjus Collaboration A262 (1987) 463

Edmunds, D., see Fréjus Collaboration A262 (1987) 463
El-Ghazzawy, O., see Elson, J. A262 (1987) 366

Elson, J., O. El-Ghazzawy and D.G. Sarantites, A multiprocessor system for rapid data analysis A262 (1987) 366
Englert, P., R.C. Reedy and J.R. Arnold, Thick-target bombardments with high energy charged particles: experimental improvements and spatial distribution of low-energy secondary neutrons A262 (1987) 496
Erlandsson, B., see Bjurman, B. A262 (1987) 548
Ernwein, J., see Fréjus Collaboration A262 (1987) 463
Eschstruth, P., see Fréjus Collaboration A262 (1987) 463
Escoubes, B., see Mouëllic, B. A262 (1987) 269

Fabjan, C.W., see Åkesson, T. A262 (1987) 243
Fay, J., see Mouëllic, B. A262 (1987) 269
Feinberg, B., see Meyerhof, W.E. A262 (1987) 10
Fiedler, K., see Baran, R. A262 (1987) 541
Finckh, E., K. Geissdörfer, R. Lin, S. Schindler and J. Strate, Method for data analysis of three particle experiments by Monte Carlo simulation A262 (1987) 441
Fischer, R.D., see Novotny, R. A262 (1987) 340
Fontaine, J.M., see Arignon, M. A262 (1987) 207
Forstner, Ch., see Gruëbler, W. A262 (1987) 307
Fortgang, C.M., G.O. Bolme, J. Lamoureux and D.J. Liska, Cryogenic experiments on rf accelerating structures A262 (1987) 197
Fréjus Collaboration, Ch. Berger, A. Hofmann, H. Mönch, F. Raupauch, P. Schleper, G. Schmitz, J. Tutas, B. Voigtländer, C. Arpesella, Y. Benadjal, Ph. Bernaudin, D. Blum, C. Bourdarious, J. Brugnon, M. Corazzi, G. Deuzet, B. Dudelzak, P. Eschstruth, S. Jullian, D. Lalanne, F. Laplanche, C. Longuemare, C. Paulot, A. Reboux, Ph. Roy, J.L. Saury, G. Szklarz, L. Behr, R.W. Bland, F. Bousser, A. Debraine, B. Degrange, R. Marbot, U. Nguyen-Khac, B. Pietrzyk, J. Raguet, P. Serri, S. Tisserant, M. Arignon, M. Arnaud, A. Baracat, P. Bareyre, R. Barloutaud, R. Benait, A. Borg, G. Chardin, E. Coulareau, L. Di Ciaccio, D. Edmunds, J. Ernwein, G. Gerbier, J.F. Glicenstein, J. Heitzmann, M.A. Jabiol, M. Jacquet, W. Kolton, Y. Laigneau, C. Mathis, L. Mosca, L. Moscoso, P. Pailler, S. Palanque, J. Pelle, B. Tallini, K.H. Becker, H.J. Daum, S. Denski, R. Hinners, W. Kohrs, B. Kuznik, R. Mayer, H. Meyer, D. Ortmann, J. Peters, M. Schubnell, J. Thierjung, P. Wintgen and Y. Wei, The Fréjus nucleon decay detector A262 (1987) 463
Frühwirth, R., Application of Kalman filtering to track and vertex fitting A262 (1987) 444
Fujima, K., see Kimura, M. A262 (1987) 114
Fujimoto, F., see Kawatsura, K. A262 (1987) 33
Fujimoto, F., see Kawatsura, K. A262 (1987) 150
Fujioka, S., see Shima, K. A262 (1987) 132
Fukumoto, S., see Ueno, A. A262 (1987) 170
Fukushima, K., see Gomei, Y. A262 (1987) 534
Fukuzawa, F., see Ogawa, H. A262 (1987) 23
Fukuzawa, F., Target dependence of equilibrium mean charge of fast ions emerging from solids A262 (1987) 123

Gaboriaud, M.N., see Rozet, J.P. A262 (1987) 84
Garcia, M.A., see Bernardi, E. A262 (1987) 229
Gardner, R.P., see Lee, M.C. A262 (1987) 430
Geissdörfer, K., see Finckh, E. A262 (1987) 441
Gerbier, G., see Fréjus Collaboration A262 (1987) 463
Glicenstein, J.F., see Fréjus Collaboration A262 (1987) 463
Gomei, Y. and K. Fukushima, Touschek lifetime during acceleration considering multiple collisions in an electron synchrotron (*Letter to the Editor*) A262 (1987) 534
Gomez, J.J., J. Velasco and E. Maestro, Study of an algorithm for electron–hadron separation in modular homogeneous calorimeters A262 (1987) 284
Googins, J., A. Owens, E. Wilkinson and C.W. Chase Jr, A simple method for cleaning NaI(Tl) crystals (*Letter to the Editor*) A262 (1987) 544
Gould, H., see Meyerhof, W.E. A262 (1987) 10
Granneman, E.H.A., see Ivanov, S.T. A262 (1987) 179
Grimm, P., F.-J. Hambsch, M. Mutterer, J.P. Theobald and S. Kubota, Fast decay components in the scintillation gases Ar, Ar–N_2, Xe, and He–Xe excited by heavy-ion impact A262 (1987) 394
Gruëbler, W., V. König, P.A. Schmelzbach, M. Bittcher, B. Vuaridel, Ch. Forstner, D. Singy, I. Slaus and A. Chrisholm, A new type of polarimeter for vector- and tensor-polarized deuterons for applications in intermediate energy physics A262 (1987) 307
Gudat, W., see Pflüger, J. A262 (1987) 528

Haas, B., see Novotny, R. A262 (1987) 340
Hall, J., see Richard, P. A262 (1987) 69

Hall, S.J., see MacGregor, I.J.D. . . . A262 (1987) 347
Hambsch, F.-J., see Grimm, P. . . . A262 (1987) 394
Hammersley, A., see Ponman, T. . . . A262 (1987) 419
Haruyama, Y., see Ogawa, H. . . . A262 (1987) 23
Heinen, W., see Pflüger, J. . . . A262 (1987) 528
Heitzmann, J., see Fréjus Collaboration . . . A262 (1987) 463
Hingmann, R., see Novotny, R. . . . A262 (1987) 340
Hinners, R., see Fréjus Collaboration . . . A262 (1987) 463
Hino, K.-I., see Watanabe, T. . . . A262 (1987) 29
Hippler, R., see Schuch, R. . . . A262 (1987) 6
Hippler, R., see Datz, S. . . . A262 (1987) 62
Hirasima, Y., A. Nakamoto, H. Murakami, K. Okudaira and T. Yamagami, Development of an auroral X-ray imager using a two-dimensional array of Si(Li) semiconductor detectors . . . A262 (1987) 503
Hofmann, A., see Fréjus Collaboration . . . A262 (1987) 463
Hofmann, A., see Baran, R. . . . A262 (1987) 541
Hohlwein, D., see Born, R. . . . A262 (1987) 359
Hoshino, N., see Ieki, K. . . . A262 (1987) 323
Huang, K.-N., Polarization and angular correlations in electron–ion collisions . . . A262 (1987) 156
Huldt, S., see Levin, J.C. . . . A262 (1987) 106
Huxtable, G., see Yorkston, J. . . . A262 (1987) 353

Ieki, K., N. Hoshino, M. Iwase, H. Ohnuma, Y. Takahashi and H. Orihara, A liquid-helium scintillator as a fast-neutron polarimeter . . . A262 (1987) 323
Ikegami, H., see Ogawa, H. . . . A262 (1987) 23
Isbert, J., see Mathis, K.D. . . . A262 (1987) 403
Ishihara, T., see Shima, K. . . . A262 (1987) 132
Ishii, K., see Ohura, M. . . . A262 (1987) 137
Ishii, K., see Arai, H. . . . A262 (1987) 144
Isozumi, Y., see Kishimoto, S. . . . A262 (1987) 413
Ivanov, S.T., F. Siebenlist, R.W. Thomae, E.H.A. Granneman, J. Los, P.W. Van Amersfoort, H. Klein, A. Schempp and T. Weis, Bunching of intense low-energy ion beams in a periodic focusing quadrupole channel A262 (1987) 179
Iwai, M., I. Shimamura and T. Watanabe, Irregularities in the differential and integral cross sections figures for ion–atom collisions in the plane-wave Born approximation . . . A262 (1987) 37
Iwase, M., see Ieki, K. . . . A262 (1987) 323

Jabiol, M.A., see Fréjus Collaboration . . . A262 (1987) 463
Jacquet, M., see Fréjus Collaboration . . . A262 (1987) 463
Janson, S.W., see Kostroun, V.O. . . . A262 (1987) 110
Johannson, S.-E., see Levin, J.C. . . . A262 (1987) 106
Jullian, S., see Fréjus Collaboration . . . A262 (1987) 463

Kakurai, K., see Born, R. . . . A262 (1987) 359
Kambara, T., see Kanai, Y. . . . A262 (1987) 128
Kambara, T., see Mizogawa, T. . . . A262 (1987) 141
Kamber, E.Y., see Cocke, C.L. . . . A262 (1987) 89
Kanai, Y., Y. Awaya, T. Kambara, M. Kase, H. Kumagai, T. Mizogawa and K. Shima, Charge-state distribution measurements of heavy ions . . . A262 (1987) 128
Kanai, Y., see Mizogawa, T. . . . A262 (1987) 141
Kase, M., see Tawara, H. . . . A262 (1987) 95
Kase, M., see Kanai, Y. . . . A262 (1987) 128
Kase, M., see Mizogawa, T. . . . A262 (1987) 141
Katano, R., see Kishimoto, S. . . . A262 (1987) 413
Katayama, I., see Ogawa, H. . . . A262 (1987) 23
Kawatsura, K., A. Ootuka, M. Sataka, K. Komaki, H. Naramoto, K. Ozawa, Y. Nakai and F. Fujimoto, Radiative electron capture in heavy ion and He collisions . . . A262 (1987) 33
Kawatsura, K., M. Sataka, A. Ootuka, K. Komaki, H. Naramoto, K. Ozawa, Y. Nakai and F. Fujimoto, Energy and lifetime measurements in highly ionized chlorine . . . A262 (1987) 150
Kellie, J.D., see MacGregor, I.J.D. . . . A262 (1987) 347
Kelling, F.E.T., see De Vries, J. . . . A262 (1987) 385
Kimura, M., N. Kobayashi, S. Ohtani and H. Tawara, Electron transfer into selective excited states in collisions of highly stripped C, N, O and Ne ions with H and H_2 . . . A262 (1987) 19

Kimura, M., N.F. Lane, K. Fujima and H. Sato, Theory of ion–surface collisions: cascade study of He^+ projectile ion on TaC surface . . . A262 (1987) 114
Kishimoto, S., Y. Isozumi, R. Katano and H. Takekoshi, Operation of helium-filled proportional counter at low temperatures (4.2–295 K) . . . A262 (1987) 413
Klanner, R., see Bernardi, E. . . . A262 (1987) 229
Klein, H., see Ivanov, S.T. . . . A262 (1987) 179
Klemt, E., Angular correlations in the decay of the free neutron . . . A262 (1987) 215
Kneissl, U., see Novotny, R. . . . A262 (1987) 340
Knudsen, H., see Datz, S. . . . A262 (1987) 62
Kobayashi, M. and S. Kobayashi, Longitudinal segmentation of total absorption electromagnetic calorimeters with photodiode readout . . . A262 (1987) 264
Kobayashi, N., see Kimura, M. . . . A262 (1987) 19
Kobayashi, S., see Kobayashi, M. . . . A262 (1987) 264
Koch, G., see Novotny, R. . . . A262 (1987) 340
Kohno, I., see Tawara, H. . . . A262 (1987) 95
Kohrs, W., see Fréjus Collaboration . . . A262 (1987) 463
Kolton, W., see Fréjus Collaboration . . . A262 (1987) 463
Komaki, K., see Kawatsura, K. . . . A262 (1987) 33
Komaki, K., see Kawatsura, K. . . . A262 (1987) 150
Kondo, S., see Takasaki, F. . . . A262 (1987) 224
König, V., see Gruëbler, W. . . . A262 (1987) 307
Kostroun, V.O. and S.W. Janson, Atomic physics experiments with the Cornell electron beam ion source . . . A262 (1987) 110
Kötz, U., see Bernardi, E. . . . A262 (1987) 229
Krause, H.F., see Schuch, R. . . . A262 (1987) 6
Krause, H.F., see Datz, S. . . . A262 (1987) 62
Kubota, S., see Grimm, P. . . . A262 (1987) 394
Kühn, W., see Novotny, R. . . . A262 (1987) 340
Kumabe, I., see Ueno, A. . . . A262 (1987) 170
Kumagai, H., see Tawara, H. . . . A262 (1987) 95
Kumagai, H., see Mizogawa, T. . . . A262 (1987) 141
Kumagai, H., see Kanai, Y. . . . A262 (1987) 128
Kuroki, K., see Yamazaki, Y. . . . A262 (1987) 118
Kuznik, B., see Fréjus Collaboration . . . A262 (1987) 463

Lac, C.D., see Arignon, M. . . . A262 (1987) 207
Laigneau, Y., see Fréjus Collaboration . . . A262 (1987) 463
Lalanne, D., see Fréjus Collaboration . . . A262 (1987) 463
Lamarche, F., see Åkesson, T. . . . A262 (1987) 243
Lamoureux, J., see Fortgang, C.M. . . . A262 (1987) 197
Lane, N.F., see Kimura, M. . . . A262 (1987) 114
Laplanche, F., see Fréjus Collaboration . . . A262 (1987) 463
Larsen, B., see Mouëllic, B. . . . A262 (1987) 269
Laurent, H., see Rozet, J.P. . . . A262 (1987) 84
Lee, D.H., see Richard, P. . . . A262 (1987) 69
Lee, M.C., K. Verghese and R.P. Gardner, Extension of the semiempirical germanium detector response function to low energy gamma rays . . . A262 (1987) 430
Lehar, F., see Arignon, M. . . . A262 (1987) 207
Leroy, C., see Åkesson, T. . . . A262 (1987) 243
Levin, J.C., H. Cederquist, C.-S. O, R.T. Short, I.A. Sellin, L. Liljeby, S. Huldt, S.-E. Johannson, E. Nilsson and D.A. Church, Production of very cold, highly charged ions by synchrotron radiation: comparisons of the "scalpel" and "hammer" methods . . . A262 (1987) 106
Levman, G., see Bernardi, E. . . . A262 (1987) 229
Liljeby, L., see Levin, J.C. . . . A262 (1987) 106
Lin, C.-D., see Mukoyama, T. . . . A262 (1987) 15
Lin, C.D., Spectroscopy and collisions with multiply charged ions . . . A262 (1987) 78
Lin, R., see Finckh, E. . . . A262 (1987) 441
Liska, D.J., see Fortgang, C.M. . . . A262 (1987) 197
Lomperski, M., see Bernardi, E. . . . A262 (1987) 229
Longuemare, C., see Fréjus Collaboration . . . A262 (1987) 463
Los, J., see Ivanov, S.T. . . . A262 (1987) 179

Lu, J.-Q., I. Ben-Zvi and J.G. Cramer, LYRAN: a program for the analysis of linac beam dynamics A262 (1987) 200
Lüke, D., see Bernardi, E. A262 (1987) 229

MacArthur, D.W. and R.E. Morgado, Fast pulse-shaping amplifier A262 (1987) 378
MacGregor, I.J.D., S.N. Dancer, J.R.M. Annand, P.A. Wallace, J.D. Kellie, S.J. Hall, J.C. McGeorge, S.V. Springham, M.R. Sené, D. Branford, A.C. Shotter, J.M. Vogt and B. Schoch, A large solid angle detector for medium energy charged particles A262 (1987) 347
Maestro, E., see Gomez, J.J. A262 (1987) 284
Marbot, R., see Fréjus Collaboration A262 (1987) 463
Mathis, C., see Fréjus Collaboration A262 (1987) 463
Mathis, K.D., J. Isbert and M. Simon, The analysis of heavy ion induced light signals derived from a gas scintillation drift chamber A262 (1987) 403
Matsuo, T., see Tawara, H. A262 (1987) 95
Mattsson, S., see Bjurman, B. A262 (1987) 548
Maurer, R.J., see Watson, R.L. A262 (1987) 99
Mayer, R., see Fréjus Collaboration A262 (1987) 463
McCubbin, M.L., see Åkesson, T. A262 (1987) 243
McCubbin, N.A., see Åkesson, T. A262 (1987) 243
McDonald, R.J., see Meyerhof, W.E. A262 (1987) 10
McGeorge, J.C., see MacGregor, I.J.D. A262 (1987) 347
McGuire, J.H., Mechanisms for production of highly charged ions A262 (1987) 48
Menichetti, E., see Biino, C. A262 (1987) 408
Metag, V., see Novotny, R. A262 (1987) 340
Meyer, H., see Fréjus Collaboration A262 (1987) 463
Meyerhof, W.E., R. Anholt, X.-Y. Xu, H. Gould, B. Feinberg, R.J. McDonald, H.E. Wegner and P. Thieberger, Multiple ionization and capture in relativistic heavy-ion atom collisions A262 (1987) 10
Miller, P.D., see Schuch, R. A262 (1987) 6
Miller, P.D., see Datz, S. A262 (1987) 62
Mizogawa, T., see Kanai, Y. A262 (1987) 128
Mizogawa, T., Y. Awaya, T. Kambara, Y. Kanai, M. Kase, H. Kumagai, P.H. Mokler and K. Shima, Target thickness dependence of projectile Ar K X-rays. L-shell nonequilibrium A262 (1987) 141
Mokler, P.H., see Mizogawa, T. A262 (1987) 141
Mönch, H., see Fréjus Collaboration A262 (1987) 463
Morgado, R.E., see MacArthur, D.W. A262 (1987) 378
Mori, Y., see Ueno, A. A262 (1987) 170
Morita, S., see Ohura, M. A262 (1987) 137
Morita, S., see Arai, H. A262 (1987) 144
Mosca, L., see Fréjus Collaboration A262 (1987) 463
Moscoso, L., see Fréjus Collaboration A262 (1987) 463
Mouëllic, B., J.C. Santiard, M.G. Pia, M. Chemarin, J. Fay, B. Larsen, J.M. Brom and B. Escoubes, A stack of two-dimensional multiwire proportional chambers as part of an electromagnetic calorimeter A262 (1987) 269
Mühlhans, R., see Novotny, R. A262 (1987) 340
Mukoyama, T. and C.-D. Lin, Finite-base-set expansion method for inner-shell ionization in ion–atom collisions A262 (1987) 15
Murakami, H., see Hirasima, Y. A262 (1987) 503
Mutterer, M., see Grimm, P. A262 (1987) 394

Nakai, Y., see Kawatsura, K. A262 (1987) 33
Nakai, Y., see Kawatsura, K. A262 (1987) 150
Nakamoto, A., see Hirasima, Y. A262 (1987) 503
Naramoto, H., see Kawatsura, K. A262 (1987) 33
Naramoto, H., see Kawatsura, K. A262 (1987) 150
Neerings, H., see Vlieg, E. A262 (1987) 522
Nguyen-Khac, U., see Fréjus Collaboration A262 (1987) 463
Nilsson, E., see Levin, J.C. A262 (1987) 106
Norbeck, E., T.P. Dubbs and L.G. Sobotka, Spin coating thin films of plastic scintillator (*Letter to the Editor*) . A262 (1987) 546
Noro, T., see Ogawa, H. A262 (1987) 23
Novotny, R., R. Riess, R. Hingmann, H. Ströher, R.D. Fischer, G. Koch, W. Kühn, V. Metag, R. Mühlhans, U. Kneissl, W. Wilke, B. Haas, J.P. Vivien, R. Beck, B. Schoch and Y. Schutz, Detection of hard photons with BaF_2 scintillators A262 (1987) 340

O, C.-S., see Levin, J.C. A262 (1987) 106
O-Ohata, K., see Ueno, A. A262 (1987) 170
Offermann, E.A.J.M., see Blok, H. A262 (1987) 291
Offermann, E.A.J.M., C.W. De Jager and H. De Vries, The optical properties of the QDD magnetic spectrometer at NIKHEF-K A262 (1987) 298
Ogawa, H., I. Katayama, Y. Haruyama, T. Noro, H. Ikegami, F. Fukuzawa, K. Yoshida, A. Aoki and I. Sugai, Electron capture from K shells in Cu and Ge by 72, 62 and 52 MeV $^3He^{2+}$ beams A262 (1987) 23
Ogura, K., see Ueno, A. A262 (1987) 170
Ohnuma, H., see Ieki, K. A262 (1987) 323
Ohtani, S., see Kimura, M. A262 (1987) 19
Ohura, M., K. Ozawa, J.H. Chang, Y. Yamamoto, S. Morita and K. Ishii, X-ray production by channeled ions . A262 (1987) 137
Okudaira, K., see Hirasima, Y. A262 (1987) 503
Olsen, L.H., see Åkesson, T. A262 (1987) 243
Olszewski, R., see Baran, R. A262 (1987) 541
Ootuka, A., see Kawatsura, K. A262 (1987) 33
Ootuka, A., see Kawatsura, K. A262 (1987) 150
Orihara, H., see Arai, H. A262 (1987) 144
Orihara, H., see Ieki, K. A262 (1987) 323
Ortmann, D., see Fréjus Collaboration A262 (1987) 463
Ortner, H.W., see Baran, R. A262 (1987) 541
Owens, A., see Googins, J. A262 (1987) 544
Owens, R.O., see Annand, J.R.M. A262 (1987) 329
Ozawa, K., see Kawatsura, K. A262 (1987) 33
Ozawa, K., see Ohura, M. A262 (1987) 137
Ozawa, K., see Kawatsura, K. A262 (1987) 150

Pailler, P., see Fréjus Collaboration A262 (1987) 463
Palanque, S., see Fréjus Collaboration A262 (1987) 463
Palestini, S., see Biino, C. A262 (1987) 408
Patzelt, C., see Baran, R. A262 (1987) 541
Paulot, C., see Fréjus Collaboration A262 (1987) 463
Peacher, J.L., Eikonal methods for multielectron ion–atom collisions A262 (1987) 42
Pelle, J., see Fréjus Collaboration A262 (1987) 463
Pepmiller, P.L., see Datz, S. A262 (1987) 62
Perrot, F., see Arignon, M. A262 (1987) 207
Pesando, L., see Biino, C. A262 (1987) 408
Peters, J., see Fréjus Collaboration A262 (1987) 463
Petit, F., see Arignon, M. A262 (1987) 207
Pflüger, J., W. Heinen and W. Gudat, On the thermal stability of the $SmCo_5$ magnet structure for the BESSY undulator A262 (1987) 528
Pia, M.G., see Mouëllic, B. A262 (1987) 269
Piccotti, A., see Biino, C. A262 (1987) 408
Pietrzyk, B., see Fréjus Collaboration A262 (1987) 463
Politis, M.F., see Rozet, J.P. A262 (1987) 84
Ponman, T., A. Hammersley and G. Skinner, Error analysis for a noncyclic imaging system A262 (1987) 419

Raguet, J., see Fréjus Collaboration A262 (1987) 463
Raupauch, F., see Fréjus Collaboration A262 (1987) 463
Reading, J.F., Theories of ion–atom collisions A262 (1987) 160
Reboux, A., see Fréjus Collaboration A262 (1987) 463
Reedy, R.C., see Englert, P. A262 (1987) 496
Richard, P., J. Hall, J.L. Shingpaugh, J.M. Sanders, T.N. Tipping, T.J.M. Zouros, D.H. Lee and H. Schmidt-Böcking, One- and two-electron processes in collisions of heavy ions with H_2 and He A262 (1987) 69
Riess, R., see Novotny, R. A262 (1987) 340
Roncin, P., see Rozet, J.P. A262 (1987) 84
Ros, E., see Bernardi, E. A262 (1987) 229
Rosseel, T.M., see Datz, S. A262 (1987) 62
Roy, Ph., see Fréjus Collaboration A262 (1987) 463
Rozet, J.P., M.F. Politis, L. Blumenfeld, D. Vernhet, K. Wohrer, A. Touati, C. Stephan, A. Chetioui, P. Roncin, H. Laurent, M.N. Gaboriaud, M. Barat and H. Bachau, Investigation of angular momenta and correlation patterns in doubly excited states populated by low velocity double charge exchange A262 (1987) 84

Saito, H., see Takasaki, F. . . . A262 (1987) 224
Samuelsson, C., Application of a recursion formula to air sampling of radon daughters . . . A262 (1987) 457
Sanders, J.M., see Richard, P. . . . A262 (1987) 69
Santiard, J.C., see Mouëllic, B. . . . A262 (1987) 269
Sarantites, D.G., see Elson, J. . . . A262 (1987) 366
Sarkadi, L., Theoretical studies of L_3-subshell alignment induced by heavy ions . . . A262 (1987) 45
Sataka, M., see Kawatsura, K. . . . A262 (1987) 33
Sataka, M., see Kawatsura, K. . . . A262 (1987) 150
Sato, H., see Kimura, M. . . . A262 (1987) 114
Saury, J.L., see Fréjus Collaboration . . . A262 (1987) 463
Schaerf, C., see D'Angelo, A. . . . A262 (1987) 537
Schempp, A., see Ivanov, S.T. . . . A262 (1987) 179
Schindler, S., see Finckh, E. . . . A262 (1987) 441
Schleper, P., see Fréjus Collaboration . . . A262 (1987) 463
Schmelzbach, P.A., see Gruëbler, W. . . . A262 (1987) 307
Schmidt-Böcking, H., see Richard, P. . . . A262 (1987) 69
Schmitz, G., see Fréjus Collaboration . . . A262 (1987) 463
Schneider, J.R., see Born, R. . . . A262 (1987) 359
Schoch, B., see Novotny, R. . . . A262 (1987) 340
Schoch, B., see MacGregor, I.J.D. . . . A262 (1987) 347
Schubnell, M., see Fréjus Collaboration . . . A262 (1987) 463
Schuch, R., S. Datz, P.F. Dittner, R. Hippler, H.F. Krause and P.D. Miller, Measurement of inelasticities for charge correlated multiple ionization of Ne by fast C^{6+} ions . . . A262 (1987) 6
Schutz, Y., see Novotny, R. . . . A262 (1987) 340
Sellin, I.A., see Levin, J.C. . . . A262 (1987) 106
Selonke, F., see Bernardi, E. . . . A262 (1987) 229
Seman, M., see Åkesson, T. . . . A262 (1987) 243
Sené, M.R., see MacGregor, I.J.D. . . . A262 (1987) 347
Sera, K., see Arai, H. . . . A262 (1987) 144
Serri, P., see Fréjus Collaboration . . . A262 (1987) 463
Shima, K., see Kanai, Y. . . . A262 (1987) 128
Shima, K., S. Fujioka, Y. Tajima, T. Ishihara and M. Yamanouchi, Charge states of fast Cu ions in solids . . . A262 (1987) 132
Shima, K., see Mizogawa, T. . . . A262 (1987) 141
Shimamura, I., see Iwai, M. . . . A262 (1987) 37
Shimizu, T., see Takasaki, F. . . . A262 (1987) 224
Shingpaugh, J.L., see Richard, P. . . . A262 (1987) 69
Shinji, O., see Takasaki, F. . . . A262 (1987) 224
Short, R.T., see Levin, J.C. . . . A262 (1987) 106
Shotter, A.C., see MacGregor, I.J.D. . . . A262 (1987) 347
Shotter, A.C., see Yorkston, J. . . . A262 (1987) 353
Siebenlist, F., see Ivanov, S.T. . . . A262 (1987) 179
Simon, M., see Mathis, K.D. . . . A262 (1987) 403
Singy, D., see Gruëbler, W. . . . A262 (1987) 307
Sirois, Y., see Åkesson, T. . . . A262 (1987) 243
Skinner, G., see Ponman, T. . . . A262 (1987) 419
Slaus, I., see Gruëbler, W. . . . A262 (1987) 307
Sobotka, L.G., see Norbeck, E. . . . A262 (1987) 546
Springham, S.V., see MacGregor, I.J.D. . . . A262 (1987) 347
Stephan, C., see Rozet, J.P. . . . A262 (1987) 84
Stolterfoht, N., see Datz, S. . . . A262 (1987) 62
Strate, J., see Finckh, E. . . . A262 (1987) 441
Ströher, H., see Novotny, R. . . . A262 (1987) 340
Sugai, I., see Ogawa, H. . . . A262 (1987) 23
Syme, D.B., see Yorkston, J. . . . A262 (1987) 353
Szklarz, G., see Fréjus Collaboration . . . A262 (1987) 463

Tajima, Y., see Shima, K. . . . A262 (1987) 132
Takada, Y. and I. Abe, Multiple pencil beams for proton computed tomography . . . A262 (1987) 511
Takahashi, Y., see Ieki, K. . . . A262 (1987) 323
Takasaki, F., H. Saito, T. Shimizu, S. Kondo and O. Shinji, Development of plastic scintillation fiber . . . A262 (1987) 224
Takasaki, K., see Ueno, A. . . . A262 (1987) 170

Takekoshi, H., see Kishimoto, S. . . . A262 (1987) 413
Tallini, B., see Fréjus Collaboration . . . A262 (1987) 463
Tanis, J.A., Electron transfer and projectile excitation in single collisions . . . A262 (1987) 52
Tawara, H., see Kimura, M. . . . A262 (1987) 19
Tawara, H., T. Tonuma, T. Matsuo, M. Kase, H. Kumagai and I. Kohno, Multiply charged atomic ions produced through Coulomb explosions in heavy ion impact . . . A262 (1987) 95
Theobald, J.P., see Grimm, P. . . . A262 (1987) 394
Thieberger, P., see Meyerhof, W.E. . . . A262 (1987) 10
Thierjung, J., see Fréjus Collaboration . . . A262 (1987) 463
Thomae, R.W., see Ivanov, S.T. . . . A262 (1987) 179
Tiecke, H., see Bernardi, E. . . . A262 (1987) 229
Tipping, T.N., see Richard, P. . . . A262 (1987) 69
Tisserant, S., see Fréjus Collaboration . . . A262 (1987) 463
Tonuma, T., see Tawara, H. . . . A262 (1987) 95
Touati, A., see Rozet, J.P. . . . A262 (1987) 84
Tsirou, M., see Bernardi, E. . . . A262 (1987) 229
Tunnell, L.N., see Cocke, C.L. . . . A262 (1987) 89
Tutas, J., see Fréjus Collaboration . . . A262 (1987) 463

Ueno, A., K. Takasaki, K. Ogura, Y. Wakuta, I. Kumabe, K. O-Ohata, Y. Mori and S. Fukumoto, Faraday rotation of optically pumped sodium vapour in a weak magnetic field . . . A262 (1987) 170

Van Amersfoort, P.W., see Ivanov, S.T. . . . A262 (1987) 179
Van der Veen, J.F., see Vlieg, E. . . . A262 (1987) 522
Van Rossum, L., see Arignon, M. . . . A262 (1987) 207
Van 't Ent, A., see Vlieg, E. . . . A262 (1987) 522
Vane, C.R., see Datz, S. . . . A262 (1987) 62
Varghese, S.L., see Cocke, C.L. . . . A262 (1987) 89
Velasco, J., see Gomez, J.J. . . . A262 (1987) 284
Verghese, K., see Lee, M.C. . . . A262 (1987) 430
Vernhet, D., see Rozet, J.P. . . . A262 (1987) 84
Vivien, J.P., see Novotny, R. . . . A262 (1987) 340
Vlieg, E., A. Van 't Ent, A.P. De Jongh, H. Neerings and J.F. Van der Veen, An ultrahigh-vacuum chamber for surface X-ray diffraction combined with MBE . . . A262 (1987) 522
Vogel, W., see Bernardi, E. . . . A262 (1987) 229
Vogt, J.M., see MacGregor, I.J.D. . . . A262 (1987) 347
Voigtländer, B., see Fréjus Collaboration . . . A262 (1987) 463
Vuaridel, B., see Gruëbler, W. . . . A262 (1987) 307

Waggoner, W., see Cocke, C.L. . . . A262 (1987) 89
Wakuta, Y., see Ueno, A. . . . A262 (1987) 170
Wallace, P.A., see MacGregor, I.J.D. . . . A262 (1987) 347
Watanabe, T. and K.-I. Hino, Radiative processes in high-energy ion–atom collisions . . . A262 (1987) 29
Watanabe, T., see Iwai, M. . . . A262 (1987) 37
Watson, R.L. and R.J. Maurer, Time-of-flight analysis of dissociation products from collisions of 40 MeV Ar^{13+} with molecular oxygen . . . A262 (1987) 99
Wegner, H.E., see Meyerhof, W.E. . . . A262 (1987) 10
Wei, Y., see Fréjus Collaboration . . . A262 (1987) 463
Weis, T., see Ivanov, S.T. . . . A262 (1987) 179
Wigmans, R., see Åkesson, T. . . . A262 (1987) 243
Wilke, W., see Novotny, R. . . . A262 (1987) 340
Wilkinson, E., see Googins, J. . . . A262 (1987) 544
Willis, W.J., see Åkesson, T. . . . A262 (1987) 243
Wintgen, P., see Fréjus Collaboration . . . A262 (1987) 463
Wohrer, K., see Rozet, J.P. . . . A262 (1987) 84

Xu, X.-Y., see Meyerhof, W.E. . . . A262 (1987) 10
Xu Jianming, see Xu Qing . . . A262 (1987) 191
Xu Qing and Xu Jianming, Studies on the performance of modulating thickness linear periodic magnets . . . A262 (1987) 191

Yamagami, T., see Hirasima, Y. . . . A262 (1987) 503
Yamamoto, Y., see Ohura, M. . . . A262 (1987) 137

Yamanouchi, M., see Shima, K. A262 (1987) 132
Yamazaki, Y., see Datz, S. A262 (1987) 62
Yamazaki, Y. and K. Kuroki, Studies on multiply emitted secondary electrons (MUSE) in charged-particle solid interactions A262 (1987) 118
Yorkston, J., A.C. Shotter, D.B. Syme and G. Huxtable, Interstrip surface effects in oxide passivated ion-implanted silicon strip detectors A262 (1987) 353
Yoshida, K., see Ogawa, H. A262 (1987) 23

Zouros, T.J.M., see Richard, P. A262 (1987) 69

Nuclear Instruments and Methods in Physics Research A262 (1987) 563–566
North-Holland, Amsterdam

SUBJECT INDEX

Accelerators, Beam Handling and Targets

Proceedings of the Second US/Japan Seminar on The Physics of Highly Charged Ions Produced in Heavy Ion Collisions (Kobe, Japan, March 16–20, 1987)

Section I. Ionization and capture

Statistical aspects of ion–atom collisions, Åberg, T. A262 (1987) 1
Measurement of inelasticities for charge correlated multiple ionization of Ne by fast C^{6+} ions, Schuch, R., S. Datz, P.F. Dittner, R. Hippler, H.F. Krause and P.D. Miller A262 (1987) 6
Multiple ionization and capture in relativistic heavy-ion atom collisions, Meyerhof, W.E., R. Anholt, X.-Y. Xu, H. Gould, B. Feinberg, R.J. McDonald, H.E. Wegner and P. Thieberger A262 (1987) 10
Finite-base-set expansion method for inner-shell ionization in ion–atom collisions, Mukoyama, T. and C.-D. Lin A262 (1987) 15
Electron transfer into selective excited states in collisions of highly stripped C, N, O and Ne ions with H and H_2, Kimura, M., N. Kobayashi, S. Ohtani and H. Tawara A262 (1987) 19
Electron capture from K shells in Cu and Ge by 72, 62 and 52 MeV $^3He^{2+}$ beams, Ogawa, H., I. Katayama, Y. Haruyama, T. Noro, H. Ikegami, F. Fukuzawa, K. Yoshida, A. Aoki and I. Sugai A262 (1987) 23
Radiative processes in high-energy ion–atom collisions, Watanabe, T. and K.-I. Hino A262 (1987) 29
Radiative electron capture in heavy ion and He collisions, Kawatsura, K., A. Ootuka, M. Sataka, K. Komaki, H. Naramoto, K. Ozawa, Y. Nakai and F. Fujimoto A262 (1987) 33
Irregularities in the differential and integral cross sections figures for ion–atom collisions in the plane-wave Born approximation, Iwai, M., I. Shimamura and T. Watanabe A262 (1987) 37
Eikonal methods for multielectron ion–atom collisions, Peacher, J.L. A262 (1987) 42
Theoretical studies of L_3-subshell alignment induced by heavy ions , Sarkadi, L. A262 (1987) 45

Section II. Two-electron correlated processes

Mechanisms for production of highly charged ions, McGuire, J.H. A262 (1987) 48
Electron transfer and projectile excitation in single collisions , Tanis, J.A. A262 (1987) 52
Electron transfer processes in collisions of highly charged energetic (0.1–1.0 MeV/nucleon) ions with helium atoms, Datz, S., R. Hippler, L.H. Andersen, P.F. Dittner, H. Knudsen, H.F. Krause, P.D. Miller, P.L. Pepmiller, T.M. Rosseel, N. Stolterfoht, Y. Yamazaki and C.R. Vane A262 (1987) 62
One- and two-electron processes in collisions of heavy ions with H_2 and He, Richard, P., J. Hall, J.L. Shingpaugh, J.M. Sanders, T.N. Tipping, T.J.M. Zouros, D.H. Lee and H. Schmidt-Böcking A262 (1987) 69
Spectroscopy and collisions with multiply charged ions , Lin, C.D. A262 (1987) 78
Investigation of angular momenta and correlation patterns in doubly excited states populated by low velocity double charge exchange, Rozet, J.P., M.F. Politis, L. Blumenfeld, D. Vernhet, K. Wohrer, A. Touati, C. Stephan, A. Chetioui, P. Roncin, H. Laurent, M.N. Gaboriaud, M. Barat and H. Bachau A262 (1987) 84

Section III. Experiments with low energy ions

Angular distributions of reaction products from low energy capture by multicharged ions, Cocke, C.L., E.Y. Kamber, L.N. Tunnell, S.L. Varghese and W. Waggoner A262 (1987) 89
Multiply charged atomic ions produced through Coulomb explosions in heavy ion impact, Tawara, H., T. Tonuma, T. Matsuo, M. Kase, H. Kumagai and I. Kohno A262 (1987) 95
Time-of-flight analysis of dissociation products from collisions of 40 MeV Ar^{13+} with molecular oxygen, Watson, R.L. and R.J. Maurer A262 (1987) 99
Production of very cold, highly charged ions by synchrotron radiation: comparisons of the "scalpel" and "hammer" methods, Levin, J.C., H. Cederquist, C.-S. O, R.T. Short, I.A. Sellin, L. Liljeby, S. Huldt, S.-E. Johannson, E. Nilsson and D.A. Church A262 (1987) 106
Atomic physics experiments with the Cornell electron beam ion source, Kostroun, V.O. and S.W. Janson A262 (1987) 110

0168-9002/87/$03.50 © Elsevier Science Publishers B.V.
(North-Holland Physics Publishing Division)

Section IV. Special topics

Theory of ion–surface collisions: cascade study of He^+ projectile ion on TaC surface , Kimura, M., N.F. Lane, K. Fujima and H. Sato A262 (1987) 114
Studies on multiply emitted secondary electrons (MUSE) in charged-particle solid interactions, Yamazaki, Y. and K. Kuroki A262 (1987) 118
Target dependence of equilibrium mean charge of fast ions emerging from solids, Fukuzawa, F. A262 (1987) 123
Charge-state distribution measurements of heavy ions, Kanai, Y., Y. Awaya, T. Kambara, M. Kase, H. Kumagai, T. Mizogawa and K. Shima A262 (1987) 128
Charge states of fast Cu ions in solids, Shima, K., S. Fujioka, Y. Tajima, T. Ishihara and M. Yamanouchi A262 (1987) 132
X-ray production by channeled ions, Ohura, M., K. Ozawa, J.H. Chang, Y. Yamamoto, S. Morita and K. Ishii . A262 (1987) 137
Target thickness dependence of projectile Ar K X-rays. L-shell nonequilibrium, Mizogawa, T., Y. Awaya, T. Kambara, Y. Kanai, M. Kase, H. Kumagai, P.H. Mokler and K. Shima A262 (1987) 141
Ion-induced M X-ray emission from heavy lanthanides, Arai, H., K. Ishii, K. Sera, H. Orihara and S. Morita . . A262 (1987) 144
Energy and lifetime measurements in highly ionized chlorine, Kawatsura, K., M. Sataka, A. Ootuka, K. Komaki, H. Naramoto, K. Ozawa, Y. Nakai and F. Fujimoto A262 (1987) 150
Polarization and angular correlations in electron–ion collisions , Huang, K.-N. A262 (1987) 156

Section V. Concluding session

Theories of ion–atom collisions, Reading, J.F. A262 (1987) 160

A linear ion optics model for extraction from a plasma ion source, Dietrich, J. A262 (1987) 163
Faraday rotation of optically pumped sodium vapour in a weak magnetic field, Ueno, A., K. Takasaki, K. Ogura, Y. Wakuta, I. Kumabe, K. O-Ohata, Y. Mori and S. Fukumoto A262 (1987) 170
Bunching of intense low-energy ion beams in a periodic focusing quadrupole channel, Ivanov, S.T., F. Siebenlist, R.W. Thomae, E.H.A. Granneman, J. Los, P.W. Van Amersfoort, H. Klein, A. Schempp and T. Weis A262 (1987) 179
Studies on the performance of modulating thickness linear periodic magnets, Xu Qing and Xu Jianming A262 (1987) 191
Cryogenic experiments on rf accelerating structures, Fortgang, C.M., G.O. Bolme, J. Lamoureux and D.J. Liska A262 (1987) 197
LYRAN: a program for the analysis of linac beam dynamics, Lu, J.-Q., I. Ben-Zvi and J.G. Cramer A262 (1987) 200
Touschek lifetime during acceleration considering multiple collisions in an electron synchrotron (*Letter to the Editor*), Gomei, Y. and K. Fukushima A262 (1987) 534
How to improve the useful intensity of tagged beams (*Letter to the Editor*), D'Angelo, A. and C. Schaerf A262 (1987) 537

Instruments and Methods for High Energy Physics

Apparatus for the measurement of spin dependent observables in pp elastic scattering , Arignon, M., J. Bystricky, J. Derégel, F. Lehar, A. De Lesquen, F. Petit, L. Van Rossum, J.M. Fontaine, F. Perrot, J. Ball and C.D. Lac A262 (1987) 207
Angular correlations in the decay of the free neutron, Klemt, E. A262 (1987) 215
Development of plastic scintillation fiber, Takasaki, F., H. Saito, T. Shimizu, S. Kondo and O. Shinji A262 (1987) 224
Performance of a compensating lead–scintillator hadronic calorimeter, Bernardi, E., G. Drews, M.A. Garcia, R. Klanner, U. Kötz, G. Levman, M. Lomperski, D. Lüke, E. Ros, F. Selonke, H. Tiecke, M. Tsirou and W. Vogel A262 (1987) 229
Performance of the uranium/plastic scintillator calorimeter for the HELIOS experiment at CERN, Åkesson, T., A.L.S. Angelis, F. Corriveau, R.C.E. Devenish, G. Di Tore, C.W. Fabjan, F. Lamarche, C. Leroy, M.L. McCubbin, N.A. McCubbin, L.H. Olsen, M. Seman, Y. Sirois, R. Wigmans and W.J. Willis A262 (1987) 243
Longitudinal segmentation of total absorption electromagnetic calorimeters with photodiode readout, Kobayashi, M. and S. Kobayashi A262 (1987) 264
A stack of two-dimensional multiwire proportional chambers as part of an electromagnetic calorimeter, Mouëllic, B., J.C. Santiard, M.G. Pia, M. Chemarin, J. Fay, B. Larsen, J.M. Brom and B. Escoubes A262 (1987) 269
Study of an algorithm for electron–hadron separation in modular homogeneous calorimeters, Gomez, J.J., J. Velasco and E. Maestro A262 (1987) 284
Combined scintillation and track technique to search for $\beta\beta$-decay (*Letter to the Editor*), Akimov, Yu.K. A262 (1987) 539
A 64-element scintillator hodoscope for the determination of the pion momentum of the πM1 beam at SIN (*Letter to the Editor*), Baran, R., K. Fiedler, A. Hofmann, R. Olszewski, H.W. Ortner and C. Patzelt A262 (1987) 541

Instruments and Methods for Nuclear Spectroscopy

Path reconstruction and resolution improvement in magnetic spectrometers, Blok, H., E.A.J.M. Offermann, C.W. De Jager and H. De Vries A262 (1987) 291
The optical properties of the QDD magnetic spectrometer at NIKHEF-K, Offermann, E.A.J.M., C.W. De Jager and H. De Vries A262 (1987) 298

A new type of polarimeter for vector- and tensor-polarized deuterons for applications in intermediate energy physics, Gruëbler, W., V. König, P.A. Schmelzbach, M. Bittcher, B. Vuaridel, Ch. Forstner, D. Singy, I. Slaus and A. Chrisholm A262 (1987) 307
A liquid-helium scintillator as a fast-neutron polarimeter, Ieki, K., N. Hoshino, M. Iwase, H. Ohnuma, Y. Takahashi and H. Orihara A262 (1987) 323
Large position sensitive plastic scintillation detectors, Annand, J.R.M., G.I. Crawford and R.O. Owens A262 (1987) 329
Detection of hard photons with BaF_2 scintillators, Novotny, R., R. Riess, R. Hingmann, H. Ströher, R.D. Fischer, G. Koch, W. Kühn, V. Metag, R. Mühlhans, U. Kneissl, W. Wilke, B. Haas, J.P. Vivien, R. Beck, B. Schoch and Y. Schutz A262 (1987) 340
A large solid angle detector for medium energy charged particles, MacGregor, I.J.D., S.N. Dancer, J.R.M. Annand, P.A. Wallace, J.D. Kellie, S.J. Hall, J.C. McGeorge, S.V. Springham, M.R. Sené, D. Branford, A.C. Shotter, J.M. Vogt and B. Schoch A262 (1987) 347
Interstrip surface effects in oxide passivated ion-implanted silicon strip detectors , Yorkston, J., A.C. Shotter, D.B. Syme and G. Huxtable A262 (1987) 353
Characterization of a sapphire single crystal for the use as filter in thermal neutron scattering, Born, R., D. Hohlwein, J.R. Schneider and K. Kakurai A262 (1987) 359
A simple method for cleaning NaI(Tl) crystals (*Letter to the Editor*), Googins, J., A. Owens, E. Wilkinson and C.W. Chase Jr A262 (1987) 544
Spin coating thin films of plastic scintillator (*Letter to the Editor*), Norbeck, E., T.P. Dubbs and L.G. Sobotka . A262 (1987) 546

Computer Automated Measurement and Control

A multiprocessor system for rapid data analysis, Elson, J., O. El-Ghazzawy and D.G. Sarantites A262 (1987) 366

Nuclear Electronics

A fast module for pulse shape analysis, Annand, J.R.M. A262 (1987) 371
Fast pulse-shaping amplifier, MacArthur, D.W. and R.E. Morgado A262 (1987) 378
Fast timing with photomultiplier dynode pulses, De Vries, J. and F.E.T. Kelling A262 (1987) 385
Fast decay components in the scintillation gases Ar, Ar–N_2, Xe, and He–Xe excited by heavy-ion impact, Grimm, P., F.-J. Hambsch, M. Mutterer, J.P. Theobald and S. Kubota A262 (1987) 394
The analysis of heavy ion induced light signals derived from a gas scintillation drift chamber, Mathis, K.D., J. Isbert and M. Simon A262 (1987) 403
Response of scintillating and Cherenkov radiating glasses to gamma rays of energy below 100 MeV, Biino, C., R. Cester, E. Menichetti, S. Palestini, L. Pesando and A. Piccotti A262 (1987) 408
Operation of helium-filled proportional counter at low temperatures (4.2–295 K), Kishimoto, S., Y. Isozumi, R. Katano and H. Takekoshi A262 (1987) 413

Numerical and Data Analysis

Error analysis for a noncyclic imaging system, Ponman, T., A. Hammersley and G. Skinner A262 (1987) 419
Extension of the semiempirical germanium detector response function to low energy gamma rays, Lee, M.C., K. Verghese and R.P. Gardner A262 (1987) 430
Empirical relation between efficiency and volume of HPGe detectors, Cao Zhong A262 (1987) 439
Method for data analysis of three particle experiments by Monte Carlo simulation, Finckh, E., K. Geissdörfer, R. Lin, S. Schindler and J. Strate A262 (1987) 441
Application of Kalman filtering to track and vertex fitting, Frühwirth, R. A262 (1987) 444

Fusion

Effect of long term target changes on the neutron yield from a low intensity (d,t) neutron generator, Dalton, A.W. A262 (1987) 451

Dosimetry, Space Radiation and Medical Applications

Application of a recursion formula to air sampling of radon daughters, Samuelsson, C. A262 (1987) 457
The Fréjus nucleon decay detector, Fréjus Collaboration, Ch. Berger, A. Hofmann, H. Mönch, F. Raupauch, P. Schleper, G. Schmitz, J. Tutas, B. Voigtländer, C. Arpesella, Y. Benadjal, Ph. Bernaudin, D. Blum, C. Bourdarious, J. Brugnon, M. Corazzi, G. Deuzet, B. Dudelzak, P.Eschstruth, S. Jullian, D. Lalanne, F. Laplanche, C. Longuemare, C. Paulot, A. Reboux, Ph. Roy, J.L. Saury, G. Szklarz, L. Behr, R.W. Bland, F. Bousser, A. Debraine, B. Degrange, R. Marbot, U. Nguyen-Khac, B. Pietrzyk, J. Raguet, P. Serri, S.

Tisserant, M. Arignon, M. Arnaud, A. Baracat, P. Bareyre, R. Barloutaud, R. Benait, A. Borg, G. Chardin, E. Coulareau, L. Di Ciaccio, D. Edmunds, J. Ernwein, G. Gerbier, J.F. Glicenstein, J. Heitzmann, M.A. Jabiol, M. Jacquet, W. Kolton, Y. Laigneau, C. Mathis, L. Mosca, L. Moscoso, P. Pailler, S. Palanque, J. Pelle, B. Tallini, K.H. Becker, H.J. Daum, S. Denski, R. Hinners, W. Kohrs, B. Kuznik, R. Mayer, H. Meyer, D. Ortmann, J. Peters, M. Schubnell, J. Thierjung, P. Wintgen and Y. Wei A262 (1987) 463

Thick-target bombardments with high energy charged particles: experimental improvements and spatial distribution of low-energy secondary neutrons, Englert, P., R.C. Reedy and J.R. Arnold A262 (1987) 496

Development of an auroral X-ray imager using a two-dimensional array of Si(Li) semiconductor detectors, Hirasima, Y., A. Nakamoto, H. Murakami, K. Okudaira and T. Yamagami A262 (1987) 503

Multiple pencil beams for proton computed tomography, Takada, Y. and I. Abe A262 (1987) 511

Efficiency calibration of Ge spectrometers for measurements on environmental samples (*Letter to the Editor*), Bjurman, B., B. Erlandsson and S. Mattsson A262 (1987) 548

Synchrotron Radiation Research

An ultrahigh-vacuum chamber for surface X-ray diffraction combined with MBE, Vlieg, E., A. Van 't Ent, A.P. De Jongh, H. Neerings and J.F. Van der Veen A262 (1987) 522

On the thermal stability of the $SmCo_5$ magnet structure for the BESSY undulator, Pflüger, J., W. Heinen and W. Gudat A262 (1987) 528

Letters to the Editor

Touschek lifetime during acceleration considering multiple collisions in an electron synchrotron, Gomei, Y. and K. Fukushima A262 (1987) 534

How to improve the useful intensity of tagged beams, D'Angelo, A. and C. Schaerf A262 (1987) 537

Combined scintillation and track technique to search for $\beta\beta$-decay, Akimov, Yu.K. A262 (1987) 539

A 64-element scintillator hodoscope for the determination of the pion momentum of the πM1 beam at SIN, Baran, R., K. Fiedler, A. Hofmann, R. Olszewski, H.W. Ortner and C. Patzelt A262 (1987) 541

A simple method for cleaning NaI(Tl) crystals, Googins, J., A. Owens, E. Wilkinson and C.W. Chase Jr A262 (1987) 544

Spin coating thin films of plastic scintillator, Norbeck, E., T.P. Dubbs and L.G. Sobotka A262 (1987) 546

Efficiency calibration of Ge spectrometers for measurements on environmental samples, Bjurman, B., B. Erlandsson and S. Mattsson A262 (1987) 548